UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

April 20, 2017

Mr. Ivan Sydney
First Mesa Consolidated Villages
P.O. Box 260
Polacca, Arizona 86042

RE: Sanitary Survey for Polacca Public Water Systems (PWSID# 0400106)

Dear Mr. Sydney:

Enclosed is a copy of the sanitary survey report for the Polacca public water system. Dan Fraser, P.E. of Sleeping Giant Environmental Consultants, LLP., conducted this survey on November 14-15, 2016, under contract with the US Environmental Protection Agency, Region 9 (EPA). One of the requirements of the Safe Drinking Water Act (SDWA) is a periodic sanitary survey of the public water system to assess the ability of the system to provide safe and clean drinking water for the populations served. In general, a sanitary survey is required not less than once every 3-5 years.

Please pay particular attention to the Deficiencies sections of the report, which outlines your water system's deficiencies as well as recommended improvements to ensure the delivery of safe water. Higher priority health risks represent critical defects in hardware, operations or system management and require attention as soon as possible.

Please note that the identified deficiencies, any actions the water system takes to address them, and subsequent communication with the EPA regarding these specific deficiencies are separate and independent matters that are not specifically related to the February 16, 2017 "Finding of Violation," issued by EPA's Enforcement Division.

During the sanitary survey conducted at the Polacca water system on November 14-15, 2016, the contractor found four deficiencies which are of significant health risk to the system and the people served by the system. These deficiencies have been deemed significant deficiencies and are of the greatest health threat. Under the SDWA's Ground Water Rule ('GWR"), significant deficiencies are defined to include, but are not limited to, defects in design, operation, or maintenance, or a failure or malfunction of the sources, treatment, storage or distribution system that EPA determines to be causing, or have potential for causing, the introduction of contamination into the water delivered to consumers. See 40 C.F.R. § 141.403(a)(4).

The significant deficiencies at the Polacca system and EPA's recommended corrective actions are fully described in the report and summarized in the enclosure entitled "Polacca Water System Significant Deficiencies." Under the GWR, these significant deficiencies must be corrected within a specified time frame. The purpose of this letter is to initiate the consultation period during which the water system owner must create a plan to correct the significant deficiencies. This plan and the specific actions you take to address the significant deficiencies

must be approved by EPA before they are implemented. While the enclosed report provides recommended solutions to the identified deficiencies, if there are other options that you feel would correct the deficiencies, you may consult with EPA and seek approval.

Pursuant to 40 C.F.R. § 141.403(a)(4), you have 30 days from the date of this letter to consult with us to develop a plan to correct the significant deficiencies. The EPA-approved plan must be acted upon within 120 days from the date of this letter, or another EPA-approved timeframe. If we do not hear back from you by August 20, 2017, additional steps may be taken by EPA, which could include elevating this matter to the attention of EPA's Enforcement Office.

Please call Emmanuelle Rapicavoli at 415-972-3969 or email her at rapicavoli.emmanuelle@epa.gov to discuss your plans for remediating the above-described deficiencies or if you have any questions about this matter. Thank you for your attention to these important issues.

Sincerely,

David Albright
Manager, Drinking Water Protection Section

Enclosures

cc: Jeff Mansfield, FMCV
Alfonso Sakeva, FMCV

Polacca Water System Significant Deficiencies
April 20, 2017

1) **Older West Storage Tank ST001 Openings in the Roof** - An abandoned instrument box in ST001's roof has holes in its cover and an opening inside that penetrates the roof. These openings can allow insects, spiders and rain water to enter the tank.
Recommended Action - The openings should be sealed.

2) **Older West Storage Tank ST001 Flap Gate** - The overflow pipe for ST001 has a flap gate to prevent insects and rodents from entering the tank through the overflow pipe. However, the flap gate is not fully closing and needs lubrication. EPA Region 9's policy on protection of overflows is as follows: *In order to prevent insects, birds, and animals from entering the tank, fit the end of the overflow pipe with a flap gate (or duckbill) that seals tightly, a screen, or both. The screen may be installed loosely to come off in the event that it becomes clogged in an overflow event.*
Recommended Action - The flap gate should be lubricated so it closes securely under its own weight. EPA recommends adding an insect screen as additional protection.

3) **Older West Storage Tank ST001 Vent Screen** - The tank's vent is screened but the screen's mesh size is too large to exclude insects. EPA Region 9's policy on screening storage tank vents is as follows: *Vent screens should fit properly and be a fine enough mesh to prohibit the entry of insects and birds. Special vent designs may be necessary to prevent vents from clogging or freezing over. If the operator suspects that the tank vent tends to become clogged or frozen over, the problem should be addressed by an engineer familiar with water tank vent design.*
Recommended Action - A non-corrodible insect screen should be installed on the vent. EPA Region 9 recommends non-corrodible 24-mesh insect screen.

4) **New Upper Mesa Storage Tank ST004 Unprotected Target Cable Housing** - The new stainless steel storage tank has a functional target but the housing for the cable is not well protected against the entry of wasps and other nesting insects. Further, the tank has no access hatch to allow the operators to check for obvious contamination by insects making it even more important to ensure that insects and other contaminants cannot enter the tank.
Recommended Action - The opening around the target cable should be protected with non-corrodible screen or filled loosely with stainless steel wool. Regardless of the method chosen, the cable must have enough room to move freely as the water level changes.